



**Master Weight & Balance  
Info Sheet**

**Diamond Twinstar DA42**  
OE-FBB OE-FJJ



**AIRCRAFT BASIC DATA**

OE-FBB		
Crew	BEW	BEM
0	1364	3289
Crew	DOW	DOM
1	1443	3470
2	1522	3660

OE-FLL		
Crew	BEW	BEM
0	1314	3174
Crew	DOW	DOM
1	1393	3355
2	1472	3546

OE-FJJ		
Crew	BEW	BEM
0	1326	3229
Crew	DOW	DOM
1	1405	3383
2	1484	3573

**Abbreviations:**  
**BEW:** Basic Empty Weight  
**BEM:** Basic Empty Moment  
**DOW:** Dry Operating Weight  
**DOM:** Dry Operating Moment  
**MTOW:** Max. Take Off Weight  
**MLAW:** Max. Landing Weight

**DRY OPERATING LOAD**

COCKPIT SEATS		
Weight	Occupants	Moment
70		161
79	1P	182
80		184
90		207
100		230
108	1P+1C	248
110		253
120		276
130		299
140		322
150		345
158	2P	363
159	1P+1F	366
160		368
170		391
177	1P+1M	407
180		414
190		437
200		460

REAR SEATS		
Weight	Occupants	Moment
29	1C	95
40		131
50		163
58	2C	189
60		196
70		229
80	1F	261
90		294
98	1M	320
109	1F+1C	356
120		392
127	1M+1C	415
140		457
150		490
160	1F+1F	523
170		555
178	1M+1F	581
190		621
196	1M+1M	640

**Data Origin:** EU OPS 1.610  
**Pilot:** 79 kg (85 kg - 6 kg Baggage)  
**Male:** 98 kg (104 kg - 6 kg Baggage)  
**Female:** 80 kg (86 kg - 6 kg Baggage)  
**Child (2 to <12y):** 29 kg (35 kg - 6 kg Baggage)  
**Infant (>0 to <2y):** 0 kg

**USEFUL LOAD**

USEABLE FUEL - MAIN TANK				
Fuel Level	Indication USG	Fuel (Kg)	Moment	Endurance (75% - Fuel Flow 43 l/hr)
	3	10	26	00:17
	7	20	53	00:33
	10	30	79	00:49
1/4	13	40	105	01:06
	17	50	132	01:22
	20	60	158	01:39
1/2	23	70	184	01:54
	27	80	210	02:12
	30	90	237	02:29
	33	100	263	02:45
3/4	37	110	289	03:02
	40	120	316	03:18
	43	130	342	03:35
	47	140	368	03:51
FULL	50	150	395	04:08

BAGGAGE WEIGHTS vs. MOMENTS			
WEIGHT	NOSE	CABIN	EXTENSION
5	3	19	23
10	6	39	45
15	9	58	68
18	11	70	82
20	12	78	
25	15	97	
30	18	117	
35		136	
40		156	
45		175	

**MAX LOAD IN CABIN and EXTENSION  
COMPARTMENT TOGETHER IS 45KG!**

USEABLE FUEL - AUX TANK				
	AUX FUEL IS NOT INDICATED	Fuel (Kg)	Moment	Endurance
		160	427	04:24
		170	459	04:41
1/4		180	491	04:58
		190	523	05:14
		200	555	05:31
1/2		210	587	05:47
		220	619	06:02
		230	651	06:20
3/4		240	683	06:37
		250	715	06:53
AUX FULL		260	747	07:10

**Fuel Flow: (acc AFM)**  
 50% Power: 27.2 l/h (22,85 kg/h)  
 60% Power: 33.0 l/h (27.72 kg/h)  
 70% Power: 39.4 l/h (33,09 kg/h)  
 75% Power: 43.2 l/h (36,29 kg/h)  
 80% Power: 46.8 l/h (39,31 kg/h)

**WARNING!**  
 If AUX Fuel Qty is unknown, use full Tanks for TOW/BALANCE Calculation; for FPL  
 Endurance use only Main Tanks